

### **REMARKS**

In the January 5, 2011 Office Action, claims 1-4, 6, 7, 10, 11, 14, 17, 20 and 23-28 stand rejected in view of prior art. Claims 1-4, 6, 7, 10, 11, 14, 17, 20 and 23-28 also stand rejected as failing to comply with the written description requirement. No other objections or rejections were made in the Office Action.

### ***Status of Claims and Amendments***

In response to the January 5, 2011 Office Action, Applicants have amended claims 1-4 as indicated above. Thus, claims 1-4, 6, 7, 10, 11, 13, 14, 17, 20 and 23-31 are pending, with claims 1-4 being the only independent claims. Claims 13 and 29-31 were previously withdrawn from consideration. However, examination and rejoinder of these claims is respectfully requested, if appropriate, as indicated in the November 26, 2008 Restriction Requirement. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

### ***Claim Rejections - 35 U.S.C. §112***

On pages 3 of the Office Action, claims 1-4, 6, 7, 10, 11, 14, 17, 20 and 23-28 were rejected under 35 U.S.C. §112, first paragraph. In response, Applicants have amended claims 1-4 to clarify these claims. Applicants respectfully traverse these rejections in view of these Amendments and the following arguments.

With respect to the rejection under 35 U.S.C. §112, first paragraph, Applicants have amended the claims to clarify the edge portion extending along ~~a majority of the~~ entire length of the hollow space between the leading and trailing rotational edges of the blade. Again, Applicants note that the edge portion in the claims refers to the ring-side edge portion 53 (claims 1-2) or the plate-side edge portion 56. These parts are discussed in the specification beginning at page 12. Third, Applicants note that MPEP 2163 indicates that “An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997).” Moreover, as previously noted, the *drawings*

***form a part of the original disclosure.*** In fact, in *Vas-Cath Inc. v. Mahhurkar* (1991), the court held: “under proper circumstances, drawings alone may provide a ‘written description’ of an invention as required by § 112.” See *Vas-Cath Inc. v. Mahhurkar*, 935 F.2d 1555, 19 USPQ2d 1111 (Fed Cir. 1991). Note Figures 5-6 above as well as Figure 3 of the instant application). In view of the above explanations and Amendments, Applicants believe the claims now comply with 35 U.S.C. §112, first paragraph. Accordingly withdrawal of the rejection under 35 U.S.C. §112, first paragraph is respectfully requested.

### ***Rejections - 35 U.S.C. § 103***

On pages 4-7 of the Office Action,

- (1) Claims 1-4, 7, 11, 14 and 23-28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 1,983,201 (Van Rijswijk) in view of either U.S. Patent No. 3,536,416 (Glucksman) or U.S. Patent No. 6,848,887 (Kim); and
- (2) Claims 6, 10, 17 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the references in rejection (1) and U.S. Patent No. 6,113,353 (Sato)<sup>1</sup> as applied claims 1, 2, 3 and 4.

Van Rijswijk is a newly cited reference. The remaining references are relied upon in manners very similar to the prior Office Action. However, the Sato patent is only relied upon in rejection (2) of this Office Action. In response, Applicants have amended independent claims 1-4 to more clearly define the present invention over this combination of references and to overcome the rejection under 35 U.S.C. §112, first paragraph. Applicants respectfully traverse these rejections in view of these amendments, as explained below.

---

<sup>1</sup> On page 7 of the Office Action, it is indicated that Sato is relied upon in the prior rejection (1) of claims 1-4. However, this is not the case. Moreover, the Sato patent does not appear to be relied upon in any of the rejections to specifically disclose any claimed feature. Thus, including Sato in this rejection appears to be an inadvertent error. Clarification of this point in the next communication is respectfully requested.

Independent claims 1 and 2 now require, *inter alia*, each of the first surface portions having an edge portion extending from a main plate end thereof toward a respective one of the second surface portions, with each edge portion being laser welded to the main plate, [[and]] each edge portion having an end surface that abuts a lateral surface of the respective one of the second surface portions at a main plate end thereof to form part of the blade shape retaining mechanism and to define a main plate end of the hollow space, and the lateral surfaces of the second surface portions facing the first surface portions with the hollow spaces therebetween; and each blade having a leading rotational edge and a rotational trailing edge with the edge portion of the first side portion extending between the leading and trailing rotational edges of the blade such that an interior surface of the edge portion faces the side plate with the hollow space of the blade disposed between the interior surface of the edge portion and the side plate, the hollow space having a length measured between the leading and trailing rotational edges of the blade, and the edge portion extending along ~~a majority of the~~ entire length of the hollow space between the leading and trailing rotational edges of the blade.

Similarly, independent claims 3 and 4 now require, *inter alia*, each of the first surface portions having an edge portion extending from a main plate end thereof toward a respective one of the second surface portions, with each edge portion being laser welded to the main plate, [[and]] each edge portion having an end surface that abuts a lateral surface of the respective one of the second surface portions at a main plate end thereof to form part of the blade shape retaining mechanism and to define a main plate end of the hollow space, and the lateral surfaces of the second surface portions facing the first surface portions with the hollow spaces therebetween; and each blade having a leading rotational edge and a rotational trailing edge with the edge portion of the first side portion extending between the leading and trailing rotational edges of the blade such that an interior surface of the edge portion faces the side plate with the hollow space of the blade disposed between the interior surface of the edge portion and the side plate, the hollow space having a length measured between the leading and trailing rotational edges of the blade, and the edge portion extending along ~~a majority of the~~ entire length of the hollow space between the leading and trailing rotational edges of the blade.

Clearly these arrangements are *not* disclosed or suggested by the Van Rijswijk patent, the Glucksman patent, the Kim patent and/or the Sato patent, singularly or in combination as explained below..

The Office Action asserts that the Van Rijswijk patent discloses the previously presented edge portions (53, 56). However, the so-called edge portions (extending from plate 22 in Figure 3) in the Van Rijswijk patent extend beyond the plate 23, and do *not* abut a lateral surface of the plate 23 that faces the plate 22 with the hollow space therebetween. Rather, the tabs of the plate 22 extend beyond the plate 23 and abut an axially facing surface of a tab of the plate 23 offset from and facing away from the hollow space. The Glucksman patent and the Kim patent are merely relied upon for their disclosures of resin. However, these references do not account for the deficiencies of the Van Rijswijk patent with respect to independent claims 1-4 explained above. Accordingly, even if the Glucksman patent and/or the Kim patent were somehow combined with the device of the Van Rijswijk patent, the arrangements now set forth in independent claims 1-4 would not result. Accordingly, withdrawal of the rejection (1) of independent claims 1-4 is respectfully requested.

Regarding rejection (2), on page 7 of the Office Action, it is indicated that Sato is relied upon in the prior rejection (1) of claims 1-4. However, this is not the case. Moreover, the Sato patent does not appear to be relied upon in any of the rejections to specifically disclose any claimed feature. Thus including Sato in this rejection appears to be an inadvertent error. Clarification of this point in the next communication is respectfully requested. In any case, the Sato patent does not disclose the edge portion of independent claims 1-4, as now amended. Accordingly, combining Sato with the above references would not result in the arrangements of these independent claims.

Under U.S. patent law, the mere fact that the prior art can be modified does *not* make the modification obvious, unless an *apparent reason* exists based on evidence in the record or scientific reasoning for one of ordinary skill in the art to make the modification. See, *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). The KSR Court noted that obviousness cannot be proven merely by showing that the elements of a claimed device were known in the prior art; it must be shown that those of ordinary skill in the art would have had some "apparent reason to combine the known elements in the fashion claimed." *Id.* at 1741. The current record lacks any apparent reason, suggestion or expectation of success for combining the patents, and then further modifying the hypothetical device created by the hypothetical combination of references to create Applicants' unique arrangements of independent claims 1-4.

Moreover, Applicants believe that dependent claims 6, 7, 10, 11, 13, 14, 17, 20 and 23-31 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Also, dependent claims 6, 7, 10, 11, 13, 14, 17, 20 and 23-31 are further allowable because they include additional limitations, which in combination with the limitations of their respective independent claim 1, 2, 3 or 4, are not disclosed or suggested in the prior art. Accordingly, withdrawal of the rejections of dependent claims 6, 7, 10, 11, 13, 14, 17, 20 and 23-31 are also respectfully requested.

\* \* \*

In view of the foregoing amendment and comments, Applicants respectfully assert that claims 1-4, 6, 7, 10, 11, 13, 14, 17, 20 and 23-31 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested. As mentioned above, claims 13 and 29-31 were previously withdrawn from consideration. However, examination and rejoinder of these claims is respectfully requested, if appropriate, as indicated in the November 26, 2008 Restriction Requirement.

Respectfully submitted,

/Patrick A. Hilsmier/  
Patrick A. Hilsmier  
Reg. No. 46,034

GLOBAL IP COUNSELORS, LLP  
1233 Twentieth Street, NW, Suite 700  
Washington, DC 20036  
(202)-293-0444  
Dated: March 23, 2011

S:\03-MAR11-YTY\DK-US030726 Amendment (Applicants plural).doc